

PUBLIC HEARING
PROPOSED CLASS III UNDERGROUND INJECTION CONTROL AREA PERMIT
AND PROPOSED AQUIFER EXEMPTION FOR
GUNNISON COPPER PROJECT

February 27, 2018
7:00 p.m.

REPORTED BY:

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Certified Reporter
Certificate No. 50876

PREPARED FOR:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

(Original)



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1 PUBLIC HEARING COMMENTS, taken at 7:00 p.m., on
2 Tuesday, February 27, 2018, at the Women's Club, 1871 North
3 Johnson Road, Dragoon, Arizona, before TERESA A. VANMETER, RMR,
4 a Certified Reporter in and for the State of Arizona, County of
5 Maricopa, pursuant to the Rules of Civil Procedure.

6
7 PUBLIC HEARING OFFICER:

8 Beatrice Wong
9 U.S. Environmental Protection Agency, Region 9
10 75 Hawthorne Street
11 San Francisco, California 94105
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P R O C E E D I N G S

MS. WONG: Welcome and good evening, everyone. My name is Beatrice Wong, and I am from the U.S. Environmental Protection Agency. I am the public hearing officer for this hearing. I was this public hearing is now in session. You will have the opportunity to make comments soon, once I've explained some of the logistics and some ground rules.

EPA realizes that this is a complex issue. So EPA has an information sheet available at the sign-in table, which is on the side here between the two doors where you came in.

I'd like to introduce a few of the people from EPA who are with me here tonight. We have, to my right, David Albright, who's a supervisor of the underground injection control program. Nancy Rumrill is our staff engineer from that program, and then to my left is Rich Campbell. He's from the Office of Regional Counsel.

The purpose of this hearing is for EPA to receive your oral comments regarding the proposed -- their -- our proposal to issue the UIC area permit for Excelsior Mining Arizona, Inc., to construct and to operate an in-situ copper recovery facility, known as the Gunnison Copper Project, near the town of Willcox, Arizona.

This hearing is a formal proceeding. Your

1 comments tonight will become part of EPA's official record on
2 the matter. We commence -- EPA commenced the public comment on
3 October 25th, and the period, the original comment period, was
4 through November 24th for the proposed permit. It was extended
5 until January 8th, and then when we received a request for the
6 public hearing, we extended the public comment period again
7 until today, February 27th, and the comment period closes at the
8 end of this hearing.

9 You made submit oral comments, written comments
10 or both today. EPA gives equal consideration to written and to
11 oral comments before reaching its final decision. EPA will make
12 a decision on the final UIC permit after considering all of the
13 comments related to the permit action.

14 Therefore, EPA will not be providing responses to
15 your comment during this hearing. Instead, EPA will respond to
16 all comments in writing, and those responses will be available
17 at the time EPA issues its final decision.

18 Just so you know my role, I am serving as the
19 presiding officer for today's public hearing. I am not involved
20 in assessing the permit or in responding to the public comments.
21 My sole responsibility is to facilitate this process and to make
22 sure that those who want to make an oral comment can do so, and
23 it's done in an orderly fashion and that our public record on
24 this is clear.

25 To that end, we have a certified court reporter

1 who will be recording your comments today. And if you present
2 oral comments at the hearing, please speak clearly and slowly so
3 that she can record your comments accurately.

4 To assist her with recording your comments
5 accurately, I'd just ask that people refrain from shouting, and
6 that you don't talk over each other, and that the person who's
7 speaking really just has the opportunity to make the comment
8 that they have.

9 EPA has a sign-in table, again, right here
10 between the two entrances where Nancy is standing. You don't
11 need to sign in in order to attend this hearing, but if you'd
12 like to receive notice of EPA's final permit decision, then you
13 can provide your email address on a sign-in form.

14 If you wish to make oral comments at today's
15 hearing, there is a speaker form that you can put your name on,
16 and then I'll call them in the order that I receive them. And
17 if you write your name legibly on it, the court reporter will
18 use that to record your name properly. Before stating your
19 comments, I'll just ask that you state your name for the record.

20 If you don't wish to speak tonight, you can still
21 submit written comments. There are a comment box and sheets of
22 paper there. If you want to submit something, you can -- if you
23 have something that's prewritten, you can provide it to her,
24 also. Provide it in that comment box, also.

25 If you'd like to submit written comments here

1 today, you can feel free to just put the comments in the box.
2 If you submit written comments, it's not necessary for you to
3 provide oral comments as well tonight unless you want to add to
4 something that you you've already written since we're giving
5 equal consideration to both.

6 It's important that you know that I'm only here
7 to receive oral comments on EPA's proposed UIC permit for
8 Excelsior. Therefore, please, I ask that you refrain from
9 making comments that are not related to this specific permitting
10 action.

11 EPA's providing a microphone that I'm using for
12 your convenience. It will -- there's -- it will be available
13 for you at the podium that's in the front of -- in front of me
14 here in the front of the room.

15 The hearing is scheduled to last until 9:00
16 tonight. To ensure that everyone who wishes to speak has the
17 opportunity to speak, I'm going to initially limit speakers to
18 five minutes. And David Albright will be keeping track of time.
19 He'll hold up a card letting you know when one minute is
20 remaining, and he'll let you know when your time -- when your
21 time is up and when you should stop your comments.

22 If you want to speak more, if there's -- if all
23 of the speakers have had an opportunity, you can have another
24 opportunity after that if time permits. Otherwise, if you have
25 more to say, I certainly encourage you to submit the remainder

1 of your comments in writing in our comment box today.

2 I will call the speakers in groups of two. When
3 your name -- if it's called first, just come up to the podium
4 and you can speak. If your name is the second person that I
5 call, there's a seat next to the court reporter that you can
6 just sort of sit and wait for your turn. If you're not in the
7 room when I announce your turn to speak, I'll place your speaker
8 request form at the back, and I'll call you when every -- when
9 all of the other speakers have had an opportunity to speak.

10 And then just to ensure compliance with the
11 Americans With Disabilities Act, EPA asks that anyone who has a
12 disability who needs a reasonable accommodation to please let
13 one of us know that you need an accommodation, and we'll do our
14 best to accommodate you. So with that -- -- we actually have
15 quite a few speakers. So I said five minutes is what I'll
16 initially give you. I'll actually amend that to three minutes
17 so that we can ensure that we have all of the comments.

18 Okay. So with that, Pete Dronkers and Ellen
19 Cohen.

20

21 COMMENTS

22 MR. DRONKERS: I guess I get to go first, huh?

23 Okay. My name's Pete Dronkers. I'm with an
24 organization called Earthworks. Some of you all know me. We
25 have submitted extensive comments on this project, as well as on

1 an aquifer protection permit, and have been involved in this
2 project for over three years now, doing technical analysis as
3 well as risk assessment on the project.

4 There's a couple main things that I'd like to
5 point out now. The most important thing about this project is
6 how you monitor the groundwater quality around the mine site.
7 What we found after reviewing both the APP and the UIC, the
8 draft UIC, is that there just is not sufficient monitoring
9 protocols in place for this project. There's much too high of a
10 chance of the contaminants will escape between the existing
11 point of compliance wells, the POC wells, and because there just
12 aren't that many, it creates this gap between them where
13 lixidian (phonetic) or light sulfuric acid solution is -- they
14 just escape between the proposed point of compliance wells and
15 migrate downgradient, especially if there's a preferential
16 pathway underground that we don't know about, which is a pretty
17 high possibility. So basically, what we've been asking for is
18 more monitoring wells outside of the area of review.

19 The area of review is also too small. It's not a
20 holistic look at the broader hydrogeological complex here. It's
21 really just the mine itself, whereas we would have liked to see
22 the area of review be bigger and have monitoring wells much
23 farther away from where active mining will occur, and that way
24 you can actually see what's happening with water quality over
25 time, and you can compare that to the baseline levels that we

1 know now. So that's the -- that's the most important thing is
2 just monitoring is not adequate. It's not even close to
3 adequate with this project, and our comments detail that
4 extensively.

5 The other thing is what happens when contaminants
6 migrate, if they do, and they're detected in monitoring wells
7 which don't exist and aren't proposed to exist? We have to have
8 very specific criteria for what happens when baseline conditions
9 are exceeded in groundwater quality farther -- much farther away
10 from the mine site, what exactly happens. The draft permit does
11 not even come close to addressing that and to having strict
12 criteria for what happens in -- when mining has to stop and
13 rinsing has to begin, because that's what has to happen if
14 contaminants are escaping and contaminating the entire
15 groundwater system of this entire area, which is very possible.

16 We just won't know it unless there's monitoring
17 and there's adequate, tangible thresholds for what happens when
18 certain parameters are exceeded and how to correct that, and how
19 to correct it immediately. None of those things are addressed
20 properly in the draft permit, and those are what our comments
21 get at.

22 We also have 35 pages of technical information
23 using independent hydrologists, and discussing how the models
24 that EPA used are inadequate, and some of them are flawed. I
25 can talk for hours on this project, but that's just the basics.

1 MS. COHEN: So my name is Ellen Cohen. Welcome
2 to Dragoon. These comments are regarded to Gunnison Copper
3 Project, Class III, Draft Underground Injection Control Permit.
4 My letter is addressed to Ms. Rumrill, but it's to everybody
5 here involved.

6 My home lies a scant mile and a half or so
7 downstream and south of Excelsior's Gunnison Copper Project. If
8 the EPA approves the permit, as currently submitted by
9 Excelsior, by default, the Agency, the Environmental Protection
10 Agency, will also be approving several unexamined environmental
11 consequences.

12 At full field production, it's my understanding
13 that the 1,434 wells and bore holes that are up to 1,400 feet
14 deep will have been drilled through 600 feet of gravels, and
15 below the water table of the non-recharging Willcox aquifer on
16 which we rely, into this fissure prone area, and each will have
17 to be monitored and lighted 24 hours a day, 7 days a week, for
18 the projected life of the mining operation, which is stated at
19 20 years. Probably beyond my lifetime.

20 It is not clear if Excelsior plans to truck in
21 sulfuric acid to be processed on site or if it will produce its
22 own. Either way, toxic chemicals will be transported along I-10
23 so they can be injected underground, and I haven't seen any
24 information in the draft permit application regarding who will
25 be responsible for any accidents during transport, nor have I

1 found specific monitoring plans for the water treatment plant
2 effluent, evaporation and drain ponds which Excelsior's 2014
3 publicity documents say will be covered with a tarp.

4 I could not find any information about
5 Excelsior's plans for continuous monitoring of the raffinate
6 pond, the recycled water pond, the sludge storage tanks, and the
7 runoff from the winnowing plant.

8 Excelsior's 2014 publicity documents also claim,
9 quote, "There is no active water use downstream or nearby the
10 site. There's no one living nearby. No special scenic value."
11 Close quote. I strongly disagree and request that the EPA not
12 approve this permit as currently submitted. I also request that
13 a cumulative impact analysis be included in a resubmission of
14 Excelsior's permit application. This analysis must include
15 cultural impacts, social impacts, socioeconomic impacts, and
16 long-term cumulative environmental impacts. Thank you.

17 MS. WONG: Can you hear me if I speak -- can you
18 hear me?

19 AUDIENCE MEMBER: No.

20 AUDIENCE MEMBER: Barely.

21 MR. ALBRIGHT: Christine Szuter, and then George
22 Scott would be the one after.

23

24 COMMENTS

25 MS. SZUTER: Hello. I'm Christine Szuter,

1 executive director of the Amerind Foundation, as well as a
2 resident of Dragoon. Amerind is a Native American museum, a
3 Western and indigenous art gallery, and a research center with
4 10,000 visitors a year. We house 30,000 aging and contemporary
5 artifacts, 20,000 volume library, as well as archival materials.

6 Our land's been occupied way back, 13,000 years
7 ago, and today it's being using by Tohono O'odham basket weavers
8 who gather plants for their baskets and livelihood, and they
9 also support the livelihoods of many other native peoples
10 throughout our museum, store and programs that are conducted by
11 native peoples from throughout the state of Arizona to the -- to
12 Mexico.

13 Amerind's concern for the placement of the
14 Gunnison mine literally in our back yard and that of our
15 community focuses specifically on the guaranteed future high
16 quality of that water and the need for additional placements of
17 monitoring wells, and access without agreements of
18 confidentiality and the processes behind the mining operations.
19 And the first two pertain to the EPA UIC permit.

20 The Gunnison mine CEO has made public statements
21 that offer a 100 percent guarantee that the quality of water
22 will not be diminished, but these guarantees have not been
23 backed up with a plan of action and adequate financial planning
24 and backing as to what we would expect when or if the mining
25 operation contaminates the water and environment.

1 So in order to guarantee future water quality of
2 the same high quality we have today, we want a legal guarantee
3 that no contamination will occur per our comments that you
4 already have, and that we want a multi-sector committee
5 overseeing the monitoring data and the ability to require
6 restoration to the baseline analyte levels of the mine. And
7 that when or if contamination occurs, either during operation,
8 post or after -- or during closure, it will be restored to the
9 quality.

10 Second, as you heard, we're asking for additional
11 monitoring mines that have been written to you as well. We want
12 to ensure that when a breach occurs, we would know immediately.
13 Operations would be shut down and contained to limit damage to
14 our water supply. We really are stressing that particular
15 point, as well as the quality of our water.

16 All in our community are going to be faced with
17 the mine for many, many years, with its associated lighting,
18 noise, trucks and other factors diminishing our quality of life.
19 Our greatest concern, however, is the safety and health of our
20 community, our people, our institutions and our businesses, now
21 and in the future for centuries to come. This is truly what is
22 at stake now, and preservation of our groundwater requires that
23 at a minimum.

24 We thank EPA for being here, for considering our
25 request for retaining the highest quality of water we now have,

1 and for the required installation of additional monitoring wells
2 in our detailed comments. And I have the written ones that I
3 actually went four and a half minutes, under the five-minute
4 limit. So I'll give you those as well. Thank you very much.

5 MS. WONG: There's a comment box.

6

7

COMMENTS

8

MR. SCOTT: Thank you.

9

My name is George Scott. I'm a lifelong resident
10 of Benson. I was born and raised here. My family's always been
11 in business in the area. I'm a former city councilman, a former
12 mayor of Benson, and at this time I run an organization called
13 the Southeast Arizona Economic Development Group, who I'm
14 representing this evening.

15

We've been involved monitoring what the Excelsior
16 group has been doing on this project. They've been doing a lot
17 of work to make sure that this project is safe, that the water
18 table is protected and that there's going to be a lot of jobs
19 for the people here in Willcox and Benson area and Dragoon area.

20

This offers people in our area a chance to -- for
21 employment. As you might know, Cochise County is one of the --
22 a few counties in -- around the country that are actually losing
23 population because of there's not enough jobs for them to take,
24 and this project along with some others offers a great
25 opportunity for people here to get good paying jobs.

1 The -- you're going to hear from a lot of people
2 that don't live around here, some people that claim they do.
3 When I look through this crowd, and I don't see a whole lot of
4 people I've known. You know, I've been here my whole life. So
5 this is a -- to me it's a personal thing. I think the people in
6 Benson and Willcox and the surrounding area deserve to have good
7 jobs.

8 I know that the Excelsior folks have studied this
9 for many years. They've done a lot of -- they've done
10 everything they can to make sure that this project is safe, that
11 the water is safe and that the wells are monitored. You know,
12 I've gone through this with them several times, and I assure you
13 that this is going to be a good project. It's going to be good
14 economically for Cochise County, and I would encourage the EPA
15 to take into consideration the people that do need jobs and the
16 money and stuff that it will bring to Cochise County, and I ask
17 that you approve this project. Thank you.

18 MS. WONG: All right. Kathy Jacobs and Alan
19 Baker.

20
21 COMMENTS

22 MS. JACOBS: Hi. My name is Kathy Jacobs. I'm a
23 resident of Dragoon. I have some concerns regarding what the
24 mine will impact for our property values if we were going to
25 resell our property. Are we going to be able to resell our

1 property? What is the restitution of property owners, when
2 contaminants are found in our wells and the water table drops,
3 the light pollution, possible unstable ground from the fissures.

4 George just said that Cochise County was losing a
5 lot of residents. It's going to lose a lot of residents, a huge
6 amount of residents, if this mine contaminates our water and
7 depletes our water. I'm a proud American, but I don't
8 understand how a Canadian company with multiple foreign
9 investors can come to where I live and contaminate my property
10 and my groundwater. Thank you very much.

11
12 COMMENTS

13 MR. BAKER: Good evening. My name is Alan Baker.
14 I'm the executive director of the Willcox Chamber of Commerce
15 and Agriculture, and the Willcox Chamber of Commerce and
16 Agriculture does support this permit and this project, and we've
17 believe it will bring jobs and good business to the area.

18 As well, prior to this, I had a responsibility
19 for 12 public water systems in southeastern Arizona, and after
20 talking with the Gunnison Copper people, I do believe that it's
21 a good project. So thank you.

22 MS. WONG: Okay. Doug Bartlett and Roger
23 Featherstone.

24
25 COMMENTS

1 MR. BARTLETT: Good evening. My name is Doug
2 Bartlett. I am a geologist, a hydrogeologist, and I have --
3 I've been working as a consulting hydrogeologist for about 40
4 years, 30 years roughly in Arizona. So I have quite a bit of
5 experience here. I co-founded the firm Clear Creek Associates.
6 Clear Creek has been involved with Excelsior and doing much of
7 the design work for the system. We're all over the state. We
8 work for municipalities, industries, utilities, mining
9 companies, small border purveyors and even regulatory agencies
10 like the ADEQ.

11 The Gunnison project is robust and well thought
12 through. The project includes concentric circles of monitoring.
13 This is an important concept, because I've heard comments
14 tonight about the monitoring being inadequate. It is quite
15 adequate. So we have the inner circle of wells that we call the
16 inner intermediate monitor wells. These are around mining
17 blocks. Outside of that we have the outer IMWs. Outside of
18 that we have the hydraulic control wells along the perimeter
19 well field. Outside of that we have the point of compliance
20 wells, which are at the edge of the permitted area.

21 So there's a lot of monitoring. This will give
22 Excelsior plenty of forewarning if an excursion should occur
23 along a fracture zone. All the fracture zones -- all the key
24 fracture zones are intersected by this monitoring system.

25 The -- in addition to the modeling -- I mean, to

1 the monitoring, we also have the hydraulic control system, which
2 will create an inward gradient around the perimeter of the well
3 field, which will further help to control the migration of
4 solutions.

5 Excelsior has done an excellent job, in my
6 opinion, of using good science as part of their design program.
7 And I've enjoyed working on this project, and I've also enjoyed
8 working with the regulatory community. You guys have done an
9 excellent job of putting together some very good permits, and
10 they include quite a bit of protection for the groundwater
11 system around the mining property.

12 I -- one last comment is that I am also the
13 national president of the American Institute of Professional
14 Geologists. Our organization is -- emphasizes the ethical and
15 professional practice of geology, and if this project in
16 Excelsior wasn't ethical and professional, I would not be
17 involved with it. Thank you.

18

19

COMMENTS

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25

MR. FEATHERSTONE: My name is Roger Featherstone.
I'm director of the Arizona Mining Reform Coalition. We've been
involved in this process for a long time. Back when Nord owned
the Johnson Camp mine, we commented on the aquifer protection
permit, and basically, we told Nord if they did a good job, we
didn't have any problems with it.

1 Now we've got a new company trying a new form of
2 mining, and let me reiterate that in-situ mining is the
3 intentional pollution of groundwater. We cannot forget that. I
4 think Excelsior, if they're -- really want to be good corporate
5 citizens, they should go ahead and mine out the Johnson Camp
6 mine and prove to us that they know what they're doing. And if
7 that -- if that's done, well, then maybe they can revisit this
8 issue. And mining out that Johnson Camp mine would create a lot
9 more jobs than an in-situ operation.

10 We need to point out that the pumps need to run
11 for 25 years non-stop, 24 hours a day, 7 days a week, 365 days a
12 year, and I don't know anybody that's capable of pulling that
13 off, 1,400 wells, with absolutely no problems.

14 The company talks about the gradient, pumping
15 more water out than they pump in. What happens to that water
16 that gets pumped out? There's nothing in the documentation that
17 shows what happens to that water. There's nothing in the
18 documentation that talks about the drawdown that water would
19 cause. It doesn't talk about this is a -- basically what
20 they're talking about is pumping out 101 gallons for every 100
21 gallons they pump in. So it's a very small difference.

22 Now, what happens if the water hits a fault or a
23 crack that's unforeseen, and the flow is more than one gallon
24 per minute or whatever from that? What happens to their
25 monitoring system in that kind of situation? What happens to

1 the solid wastes that are left over in the ponds? No mention of
2 that. What happens to the toxic chemicals that come out of the
3 ground that aren't of commercial value? There's no mention of
4 that.

5 So in closing, this is a proposal that's not very
6 well thought out. The company is talking a lot about being
7 green, but like I say, if they really want to be green, let's
8 see what their track record is on mining out the Johnson Camp
9 mine.

10 MS. WONG: Okay. We have Lupe Diaz and Randy
11 Redhawk.

12

13

COMMENTS

14 MR. DIAZ: Hello. My name is Lupe Diaz, and I am
15 a resident here in Benson, a lifelong resident of southern
16 Arizona, and I grew up in Bisbee, literally on top of a mine.
17 And so, you know, some of the technology that was used back then
18 when I was a child -- my grandfather was one of the first ones
19 that ignited the blasts for the Lavender Pit mine, and some of
20 the techniques that were used back then were really antiquated
21 compared to the technology that is used now.

22 There's a lot of precaution. There's a lot of,
23 oh, talk about green. Also conservationism and that kind of
24 stuff, and I think that having a responsible industry is
25 important to the state of Arizona as we are a copper state.

1 Every car, every cell phone that we use uses, you know, copper
2 and that kind of thing, and I think that there is responsible
3 industry that we need to look at. I think that Gunnison -- the
4 Gunnison mine has done a good job of doing that, and I do
5 support that.

6 Running around the hills of Bisbee, it did
7 provide my family with a lot of -- with good income. The
8 schools were booming. There was the Bisbee copper -- Bisbee
9 Hospital that I was born at, and that was all sponsored by a lot
10 of the tax and -- or the -- Phelps Dodge at that time.

11 So, you know, I know that there's a lot of
12 concerns when it comes down to the mine, but I think that this
13 is also part of our industry. And to be able to -- you know, to
14 be responsible, be good stewards of what we do is really, really
15 important, and I do believe that, you know, again, that Gunnison
16 has done that job. So it will provide -- again, it will provide
17 the schools. It will provide jobs for, you know, families, our
18 grand -- our children and grandchildren who are now moving away.

19 I think that it's really important that we, you
20 know, do our due diligence, and I think we have, and I think
21 that it's important that we -- and address the concerns. I do
22 hear the concerns.

23 Bisbee has some of the best water that there is.
24 Every time I go back to Bisbee, it is clear, good water. And
25 it's probably because I grew up there. And it's a good place.

1 So I'm in favor of the Gunnison mine. I know
2 that everybody's doing their due diligence, and I think the
3 questions that are being raised today are good questions. Thank
4 you very much.

5

6

COMMENTS

7

8 MR. REDHAWK: My name is Randy Redhawk. Spent
9 two years of my life trying to protect this aquifer from
10 overpumping. I was the one who got the ball rolling about three
11 years ago. Worked with the Arizona Department of Water
12 Resources for two years trying to save this aquifer, and then I
13 got involved in the initial opposition to this mine, and then
14 for health reasons, I had to back out of everything.

15

16 I do not believe the science that I've looked at,
17 and I know this aquifer better than most. You're at the very
18 upper end of this aquifer. It all goes downhill. There's no
19 guarantees that if there's any contamination going into this
20 aquifer that it's going to stop.

21

22 And it's been a steady five feet a year overall
23 on this aquifer drop. That's a lot of water to lose every year.
24 Now, talking to the head hydrologist last week for the State of
25 Arizona, he says there's now places in the lower parts of this
26 aquifer along Kansas Settlement Road that are registering 15
27 feet loss per year right now. We don't have the water here to
28 do this. And we -- so -- so I obviously oppose this, and I

1 oppose it with every cell in my body. How can a guy from
2 Australia have a Canadian mining company come down here to our
3 neighbors and mess with our water? It ain't right. It ain't
4 right. Thank you.

5 MS. WONG: Okay. Sharon Rock and Stephen
6 Twyerould, Twyerould.

7

8

COMMENTS

9 MS. ROCK: My name is Sharon Rock. And I'm not
10 technically -- I'm not a technical person. I'm not a scientist,
11 but I do know that as long as we're driven by money that we will
12 continue to make gross mistakes, and this, from everything that
13 I can read and gather, would be one of those. We seem to be
14 unable to tap into our common sense when money is involved, and
15 that's one point.

16 The other is I am from Bisbee. And yes, our
17 water is good and clear and drinkable, but we also have a toxic
18 plume that moves closer and closer to our wells every year. And
19 that is from the mining industry, and they thought they were
20 doing the right thing at that time. It all looked good. So
21 who's to say that that's not going to be the case with this?
22 Thank you.

23

24

COMMENTS

25

MR. TWYEROULD: Good evening. My name's Stephen

1 Twyerould, and I'm the president of the company. I have a Ph.D.
2 in geology and a Ph.D. in geochemistry. So I understand the
3 interaction between water and rock.

4 I've been working on the project for 10 years,
5 and we pride ourself on our technical excellence. We pride
6 ourself on the way we conduct our business and our openness and
7 transparency, and many people in the room have seen evidence of
8 that with our site tours and our information sessions and our Q
9 and A sessions.

10 So look, you know, there are a lot of issues that
11 have been talked about. Frankly, the issue comes down to one of
12 trust. And so people have, you know, choices to make. So I've
13 heard some comments from Earthworks, an environmental NGO group,
14 who've written comments based on some work by their hydrologist
15 and, you know, frankly, their objective here with this project
16 is to stop it --

17 AUDIENCE MEMBER: That's not true.

18 MR. TWYEROULD: -- or delay it, and that
19 continues, and it's not limited to this project. It's limited
20 -- it's evidenced in many projects in Arizona, and it's
21 evidenced in many projects in the U.S. That's their right.
22 They have every right to do that.

23 The flip side is I'm not asking you to trust me,
24 because you don't know me. Those that do know me do trust me
25 and our company. But I'm asking you to trust the EPA, because

1 they are truly independent. Nobody else can stand up here and
2 say they are truly independent. Their job is to protect the
3 groundwater, and they spent two years reviewing all the
4 technical data. They have their own technical team that have
5 hired in specialists to assist them, and the net result is this
6 permit, and it wouldn't be in front of you today if they didn't
7 have 100 percent confidence in that.

8 And it's not just their independent review. You
9 know, it was late last year that the Arizona Department of
10 Environmental Quality again, independent of us, issued an
11 aquifer protection permit on this project after extensive review
12 and extensive comments, and they issued that permit that stands
13 today.

14 And so you've had two independent agents,
15 agencies who have spent many, many years and many thousands of
16 dollars, and their only objective is to issue a permit that is
17 protective of the environment and the operation.

18 In addition to that, you know, we get bank
19 finance. I mean, there's people in the room, I'm sure you've
20 bought a house. What do you do when you buy a house? You go
21 and get yourself a home inspector, and that home inspector's job
22 is to look at your property you're about to buy, and as a result
23 of that give you advice. So we get bank finance. We get
24 investor finance. People are going to say you complain about
25 that. The bottom line is they don't want to invest in this

1 project unless their --

2 AUDIENCE MEMBER: Time's up, Stephen. Shut up.

3 MR. TWYEROULD: Thank you very much for your
4 time. Thank you.

5 MS. WONG: Okay. Jeff Owens and Michael Gregory.

6

7

COMMENTS

8 MR. OWENS: Hello. My name is Jeff Owens, and
9 amongst other people, there are locals here. I am from Benson,
10 also from Cochise County. And my concern mostly would be that
11 there are substantial funds, enough to remediate any kind of
12 contamination from the mine. So given that things are safe,
13 even though that people don't intend for contamination to
14 happen, companies will also leave contamination if they can't
15 afford it. So what kind of funds are available to remediate if
16 there are any of these fails?

17 As far as monitoring, I would like monitoring to
18 be available to the public who lives here. I live in Dragoon.
19 So I would like to know what specific, I guess, levels of water
20 safety are around in our backyards. So for me, it would be
21 important that there is access for the general public to see how
22 the mine is doing, and not -- not specifically from the EPA,
23 because you guys are in a national Environmental Protection
24 Agency. But what local, independent people that are not
25 employed by the mine are going to be responsible for monitoring

1 our environment, our local environment here.

2 And I am not opposed to people having jobs here
3 in Cochise County. However, I have always enjoyed Dragoon for
4 its beauty. But what will happen if this -- if people don't
5 have water? We'll leave, and we need to have a clean
6 environment to live in here. That's pretty much all I have to
7 say. Thank you.

8

9

COMMENTS

10 MR. GREGORY: My name is Michael Gregory. I live
11 in McNeal. I'm a former hazardous materials coordinator for the
12 city -- or for Cochise County, and I've served on several
13 bodies, task forces and so forth nationwide, with Department of
14 Interior, with EPA, on various mining issues, mining waste
15 issues especially.

16 In looking at this particular project, I note
17 first that we are dealing here with a basically unproved
18 technology, an untested company and virgin territory. We are
19 also dealing with a sole source aquifer, the only place we have
20 to get our drinking water from. Looking at those things
21 indicates to me that this permit should not be permitted. We
22 should not permit this operation. The risks are far too great
23 for what might happen to our water.

24 There are several problems that we need to look
25 at if the permit is granted. I would note, for instance, that

1 the toxics -- somebody else mentioned this -- which are going to
2 be pumped out of the ground need to be dealt with in the permit.
3 They are not dealt with at all well now. There are going to be
4 some really toxic problems out there, and we need to decide how
5 to deal with those, where to put them and so forth.

6 I also note that as far as I could tell from
7 looking at the permit, after closure of the operation, there was
8 only five-year surveillance required. That is nowhere near
9 enough. This technology can weaken the structures in the
10 formations underground, the passageways, the fractures and so
11 forth, and problems can occur with contamination far after five
12 years. Decades after. There has to be surveillance into that
13 kind of time frame, and that has to be paid for, as somebody
14 else mentioned. Again, if I read the permit properly, there's
15 an \$8 million surety bond required. That's nowhere near enough.
16 That's a drop in the bucket. If there is real contamination,
17 it's going to take a lot more than that to clean it up.

18 The permit should also spell out exactly how
19 people will be notified if there is contamination, and what will
20 be done to take care of that contamination and how the people
21 will be compensated for damage to private wells, property values
22 and so forth.

23 There are many other things I could add.
24 Finally, though, I would just say in the time I have left, I
25 also have grave concerns about EPA's ability to deal with this

1 permit given the fact that we are currently in a situation where
2 the agency is being downsized drastically. Where are we going
3 to have the people in your agency to deal with problems that
4 might occur here? Thank you.

5 MS. WONG: Okay. We have Fred Duval and Steve
6 Marlatt.

7
8 COMMENTS

9 MR. DUVAL: Thank you for hearing us tonight.

10 My name's Fred Duval, and I have spent my
11 professional life living at the apex of environmental protection
12 and economic development. I ran the legislation to create to
13 Kartchner State Park. I helped design Arizona's groundwater
14 legislation, which was landmark legislation; worked in the White
15 House on Clean Air, Clean Water Act.

16 Yet at the same time, I've been on the State's
17 Economic Development Commission, and I'd like to address this
18 from a global 30,000 foot perspective. I ran for governor three
19 years ago, and I tried to answer the question: Why can't we put
20 more money in our classrooms in schools? Why do we have bad
21 roads? The answer is because Arizona is poor. Arizona is one
22 of the poorest family incomes in the United States. We are poor
23 because we lack a diversity of our economic generation, and
24 because we lack sufficient exports that produce additional net
25 wealth.

1 Now, as I indicated, I've lived at this apex, and
2 I believe that not every mine is worth having. This isn't
3 Rosemont. There is good mines in good places. There are bad
4 mines in bad places. Southeast Arizona has been blessed with
5 God-given, export-ready natural resources that would be the envy
6 of other states.

7 But this is the right mine in the right place.
8 Skilled work force, minimum land impact, plenty of water, no
9 risks to downstream groundwater users, minimum transportation
10 corridors, lack of concentrative population centers. This -- in
11 the tradeoffs that we must make, as we make policy decisions to
12 grow our economy and provide opportunity for our citizens, this
13 is the right operators, the right mine, in the right place.
14 This is 800 good paying jobs.

15 Look what happened in Safford when the Safford
16 mine began. The economy began to roll. Good jobs, the workers
17 bought locally, they -- house -- housing prices went up as the
18 workers moved to Safford. These workers and the company
19 produced tax revenue to the county that lowered taxes on the
20 Arizona families that -- and that enabled them to make
21 investments in infrastructure, public safety, and most
22 importantly, schools. That can happen here. This community can
23 have that kind of economic injection that will produce the best
24 schools, the best teaching, the best opportunities for the next
25 generation.

1 This is the case where this is an opportunity for
2 this community, this part of Arizona, this doesn't come often
3 and may not come again to change the economic trajectory of
4 every family who's chosen to live here, work here and celebrate
5 the natural beauty that exists here. I hope this community will
6 address it, and the EPA will as well. Thank you.

7
8 COMMENTS

9 MR. MARLATT: My name is Steve Marlatt. I'm a
10 wildlife biologist. I've got a Bachelor of Science in wildlife
11 biology from New Mexico State University. I've lived in the
12 area for over 30 years, and I am very familiar with the area of
13 the proposed mine. I have spent extensive time hiking and
14 exploring and studying wildlife in that area.

15 Excelsior is proposing approximately 1,400 wells
16 in this area. Each of these wells will have a surrounding pad.
17 It will clear a large amount of property. So the wildlife
18 impact is going to be huge on this. I see in some of their
19 literature that they talk about there's minimal endangered
20 species, and so that's all they're really concerned about. But
21 there's lots of other animals in the area that do depend on the
22 habitat we have currently. With that quantity of wells and that
23 road structure through there, virtually all wildlife will be
24 eliminated, and so that's going to be just a tremendous impact
25 on any of the animals that use the area currently.

1 They're also talking about using lighting on all
2 of their pads. We have a large amount of migrating waterfowl
3 that use this area, as well as other birds. Lighting is a huge
4 impact to those species when they're migrating through. It
5 really messes up their migration patterns. It totally changes
6 their ability to find their way while they're migrating, and so
7 that's going to be a significant impact as well.

8 This is a desert area, so once the mine is over
9 in 25, 30 years, and they're done with their work, are they
10 really going to go out and try to restore it in any meaningful
11 way? I've never seen desert areas restored in a way that's even
12 close to what the habitat was like initially. We don't have the
13 rainfall. It's just not economic. And so this is going to be
14 permanent. So the grandchildren, great grandchildren, students
15 that I have taught in this community here will no longer be able
16 to have that area as a wild habitat. It's going to be
17 permanently impacted and destroyed.

18 There's also the potential for water
19 contamination, and while I hear Excelsior say they've done all
20 these things to try to mitigate for that, if we ever do
21 contaminate our groundwater, it's permanent as far as our
22 lifetimes. It would be thousands or tens of thousands of years
23 before we can ever get groundwater uncontaminated naturally, and
24 so basically, it's done with if that happens. And that's a huge
25 risk to take that I think most people in the area who depend on

1 the area for the groundwater are not willing to risk.

2 Lastly, I want to mention the quality of life in
3 the area. It's a rural community. It's a rural area, and
4 that's one of the things most people who live here enjoy.
5 Tourism is on the increase. We're getting more and more people
6 coming through the area that like that, and that's what they
7 come to see here. They come to see the Triangle T. They come
8 to Amerind because they like that rural character. That will no
9 longer exist if there's a giant copper mine right in the back
10 yard, and that's going to -- definitely negative on that theory.
11 Thank you.

12 AUDIENCE MEMBER: Good job.

13 MS. WONG: We've got Courtney Hull and Tricia
14 Gerrodette. I hope I said your name right.

15
16 COMMENTS

17 MR. HULL: Good evening. My name is Courtney
18 Hull. I own some property out here in Sunsites. I realize that
19 Sunsites probably won't be affected by you downstream; however,
20 having said that, I won't stand here and quote a lot of facts
21 and figures for you because I can't. I don't have that kind of
22 knowledge. Okay?

23 One gentleman stood here and said that -- he's
24 talking about independent studies and independent bodies to
25 monitoring and everything else. We in this community are

1 dependent. Okay? So regardless of all the independent bodies
2 that can verify whatever, we are dependent, and we have one
3 water table. One. When it's gone, it's gone. We get one
4 chance at it. And regardless of all the experiments, I don't
5 care what you do to Mother Earth, you can never put it back.
6 That's all I have to say. Thank you.

7

8

COMMENTS

9 MS. GERRODETTE: Good evening. Tricia
10 Gerrodette. Congratulations. Very close.

11 I have not read everything in depth, but I have
12 certainly listened to the people tonight, and I've read some of
13 the material, and I'm very concerned that there aren't enough
14 protections in place at this time in the life of the permit.
15 Indeed, water is life, and if it's contaminated, there is
16 nothing the people here can do.

17 I'm from the big city of Sierra vista, and we
18 have water systems and they can take -- can pump from a number
19 of places. But the people who depend on their wells here are
20 going to be out of luck if that aquifer is contaminated. And
21 yes, I understand that there's an increasing series of
22 monitoring wells, but I've heard that there's not an adequate
23 plan for dealing with the waste that's pumped out or what will
24 happen if those wells are contaminated.

25 And yes, I was glad to hear that the Bisbee issue

1 was mentioned, because there has been a sulphate plume migrating
2 out from the Bisbee mines towards the drinking wells, and
3 Freeport McMoRan -- took over from Phelps Dodge -- has been
4 working for a lot of decades trying to suck the water out ahead
5 of it to keep the plume from advancing. And they've slowed the
6 plume, but the plume is still advancing. And what do you do
7 once it's contaminated? So I think that's absolutely the issue
8 the people who live in this valley are facing. If the
9 contamination escapes from the plan to contain it, what will be
10 the procedures to attempt to contain it, if possible? Phelps
11 Dodge hasn't succeeded. What will be the procedure, and how
12 will their wells be protected and their livelihoods and their
13 property values? Thank you.

14 MS. WONG: Okay. We have Mark McElhaney and Dave
15 Carr.

16

17 COMMENTS

18 MR. MCELHANEY: My name is Mark McElhaney, and
19 I'm from Benson, Arizona, and I work for M3 Engineering as an
20 instrumentation and controls design. I've worked in the mining
21 industry for 14 years and have been associated with Johnson Camp
22 on and off for the last 10.

23 M3 conducted four published studies for Excelsior
24 Mining Corporation between 2011 and 2016, and culminated in the
25 feasibility study that was published at the end of 2016. I

1 designed the control strategy, the field instrumentation design,
2 communication design from the well to the process controllers
3 and the interfaces to them.

4 The Gunnison mine -- the Gunnison Copper Project
5 is designed to circulate solution flow into the substrate and
6 extract copper. M3 has designed the well field infrastructure,
7 including surface piping network, solution management piping to
8 Johnson Camp mine, well field instrumentation, including down
9 hole and well head instrumentation. M3's designs represent
10 BADCT, or Best Available Demonstrated Control Technology, for
11 the well field, solution control and pond designs.

12 Injection and recovery copper leaching solutions
13 under the proposed permit are concerned with three primary
14 issues: Injection pressure, injection into recovery volumes,
15 and hydraulic control of the injected solutions. M3 designed
16 the instrumentation and controls for the project to address
17 these three concerns and provide monitoring data recording and
18 alarms to alert operators when the design conditions have not
19 been met.

20 Injection pressure is limited by permit to
21 prevent hydrostatic pressures from opening fractures in the
22 injection zone. Allowed pressure range will be established for
23 each well based on depth, rock type, specific gravity of the
24 injected solution.

25 Flow meters on both the injection and recovery

1 wells report to the plant control system, or PCS, and can -- are
2 continuously monitored, both injection and recovery flow volume,
3 both from the individual wells and aggregate for the entire well
4 field. The data is recorded electronically at regular intervals
5 to ensure balanced flows.

6 Alarms in the PCS alert the operator when
7 unexpected imbalances in the flow which may indicate a condition
8 that needs to be addressed to bring the unit back into
9 compliance [sic].

10 Each injection well includes magnetic flow meter,
11 pressure gauge, flow control valve, air relief valves to ensure
12 accurate solution is injected into each well, and recovery wells
13 include push buttons for the sump pumps, for the submersible
14 pumps. Pressure gauge, isolation belt and sample port, magnetic
15 flow meters and check valves.

16 The signals from the well field instrumentation
17 report to the central header location that is equipped with
18 redundant processors in the programmable logic control.

19 I thank you for your time. I appreciate it.

20

21 COMMENTS

22 MR. CARR: Good evening. My name is Dave Carr.
23 I'm a hydrogeologist. I have degrees in geology from the
24 University of Arizona, Northern Arizona University. I'm an
25 associate and senior consultant, Golder Associates, based out of

1 Golder's Tempe, Arizona office. I'm a registered geologist in
2 Arizona, and a professional geologist and certified
3 hydrogeologist California. I have more than 35 years of
4 professional experience, 30 years of which are in Arizona.

5 My areas of expertise include groundwater
6 permitting, groundwater resource investigations, hydrogeologic
7 field investigations, well design installation and testing. I
8 have provided professional services to private and public sector
9 clients for over 25 years. I have managed and supported APP
10 projects in Arizona since 1994, including mines and power
11 plants. I'm familiar with various state and federal
12 environmental groundwater regulations, including the APP
13 program, the Arizona groundwater code, the UIC program, and the
14 National Environmental Policy Act.

15 Briefly, a bit about Golder, the company I work
16 for. We're a global consulting firm that specializes in ground
17 engineering, environmental services. Employee owned since 1960,
18 around 6,500 employees and 150 offices. Several offices
19 throughout the Southwest. We've been here in Arizona since
20 1994.

21 Golder has provided professional service for
22 Excelsior at Johnson Camp mine since 2015, including the phase
23 one and the ground site assessment. We helped them transfer the
24 aquifer protection permit in the former owner to Excelsior via
25 an APP amendment. We've helped them comply with several APP

1 compliance schedule items, securing an APP attempt to introduce
2 Gunnison Project Solutions to the mine, completed ambient
3 groundwater monitoring and completed the report, submitted the
4 reclamation plan, prepared contingency emergency response plan,
5 and best management practices plan.

6 My point in saying all this is that in the two
7 and a half years that I've been working for Excelsior at Johnson
8 Camp mine, my observation is that they have successfully brought
9 the site into compliance with the APP. JCM is currently -- is
10 current with their APP monitoring reporting requirements. The
11 staff are following the best management practices plan and are
12 preparing to upgrade the process solution ponds to meet APP
13 requirements and accept solutions from the Gunnison project.

14 Excelsior has demonstrated a high degree of
15 ethics, professionalism and environmental stewardship, and
16 personally, I'm confident that they will continue to operate the
17 mine properly and in compliance within environmental permits and
18 regulations. Thank you.

19 MS. WONG: Okay. Rebecca Sawyer and Tom
20 Sheridan.

21

22

COMMENTS

23 MS. SAWYER: Good evening. My name is Rebecca
24 Sawyer, and I'm a geologist. I work for Excelsior Mining on
25 permitting and compliance issues.

1 So it's very disappointing this far into the
2 permitting process to have this much misinformation regarding
3 our permit. We have made continuous efforts in this community
4 to reach out, to have informational sessions, to answer people's
5 questions. So the conclusion is people that are this
6 misinformed at this point don't want to understand the project.

7 AUDIENCE MEMBER: Time's up.

8 MS. SAWYER: Referring to the company as a
9 Canadian company with an Australian CEO. Take a look around
10 you. Take a look around at the gray shirts. That is Excelsior
11 Mining. Those are your neighbors. They live here, and they
12 work here.

13 I don't understand how we can be this far into
14 the process and nobody understand what hydraulic control is or
15 what rings of concentric monitoring mean, but it's
16 disappointing, to say the least.

17 There has been double amounts of review of this
18 project, because it's been permitted both under the State of
19 Arizona and the federal Environmental Protection Agency. Both
20 processes have been independent, detailed and excruciating.
21 There has been no question left unanswered. There is no
22 invisible secret fracture system that allows solutions to
23 migrate outside of the well field. There have been 33 miles of
24 core logged within that well field, cross sections developed
25 running north/south and east/west. There is not the possibility

1 that anything is going to escape outside of the hydraulic
2 controls.

3 Thank you very much, EPA, for the hearing.
4

5 COMMENTS

6 MR. SHERATON: Hello. My name is Tom Sheraton.
7 I'm an anthropologist and historian at the University of
8 Arizona, and one of the books that I've written is a history of
9 Arizona. So I've researched and read a lot about mining in the
10 state and also about water in the state.

11 The first thing to remember about mining is it is
12 a boom and bust economy. Now, we've heard that this mine might
13 be in operation for 20 years. I don't know how many good paying
14 jobs it will provide. I don't know how many of those jobs will
15 be hiring local people. But I do know that sooner or later it
16 will be gone, and the people here will have to live with the
17 consequences.

18 AUDIENCE MEMBER: That's right.

19 MR. SHERATON: The other thing about water in
20 this state, and Mr. Duval knows a lot about that, groundwater
21 pumping is like mining. Once the water's gone, recharge is so
22 slow that it will never account for the discharge in my
23 lifetime, in my children's lifetime, in my grandchildren's
24 lifetime. This area is not in an active management area. So by
25 that ever closer 2025, there is no mandate that recharge will

1 have to equal discharge in order for other activities to
2 continue.

3 From what I've read about water in the state of
4 Arizona, I think in my lifetime, certainly in my daughter's
5 lifetime, there are going to be many areas of Arizona that are
6 going to face severe water shortages, because the aquifers that
7 they depend on are limited, and oftentimes there's already too
8 much discharge. When you put a major mine on top of that, and
9 also run the risk of contamination, I believe that you're
10 sacrificing long-term sustainability for short-term gain.

11 You have some world class resources here. You
12 have the Amerind Foundation, and as an anthropologist -- I don't
13 work for Amerind, but I've certainly utilized its resources for
14 a very long time. You have stunning natural scenery. You have
15 very little water, and you better protect that water as much as
16 you can. Thank you.

17 MS. WONG: This hearing is scheduled to go until
18 9:00. So we have some additional time left over. So I'll
19 invite anyone who wishes to make any additional comments to come
20 up and do so. I'll give you an additional three minutes if
21 you'd like to make comments. If you haven't had a chance to
22 make comments and wish to and you haven't already commented,
23 please fill out a speaker form for our record, but you can feel
24 free to come up and you'll be given three minutes.

25 MR. WILLIAMS: I filled out a form, but obviously

1 I didn't get called.

2 MS. WONG: Okay. The speaker forms are on this
3 table.

4 MR. WILLIAMS: I already filled one out. I
5 didn't get called, though.

6 MS. WONG: Oh, you didn't?

7 MR. WILLIAMS: Matt Williams.

8 MR. ALBRIGHT: Why don't you just hold on one
9 second?

10 MS. WONG: Okay. We'll have Matt Williams and
11 Pete Dronkers.

12

13 COMMENTS

14 MR. WILLIAMS: Good evening. Thanks for having
15 me. Thanks for being here. My name's Matt Williams. I've
16 been -- I was born and raised in Benson. Been there for 50
17 years. I've also had the opportunity to be employed at Johnson
18 Camp for the last 28 years. Started off there in construction
19 back in 1990, and then advanced through operations to my current
20 position as plant manager.

21 I worked for three different companies at Johnson
22 Camp. What I can tell you is Excelsior has brought the highest
23 standard of health, safety and environmental that we've ever
24 seen there. They've spent a significant amount of money on
25 improving the property, from wildlife barriers around our ponds

1 that we never had before to numerous other cleanup activities.
2 So I think, you know, in my career there, I see a lot of good in
3 the future and a lot of opportunities for local people.

4 Johnson Camp has always lived and died by, you
5 know, the copper price up and down. I think that was mentioned
6 a little bit ago. One of the things I think that's attractive
7 about Gunnison, it's a low cost producer. I think it will
8 provide a steady state employment for Cochise County. I don't
9 think you'll see the up and downs as we've seen in the past. So
10 hope everybody can support the project and give everybody a lot
11 of opportunity here. Thank you.

12
13 COMMENTS

14 MR. DRONKERS: I'd just like to address something
15 Mr. Twyerould said about my organization opposing this project
16 categorically. There's no evidence whatsoever that -- I have no
17 problem with this project moving ahead, but I look at the
18 technical details, and I see a situation where they're literally
19 only monitoring on the exact outside of the perimeter of the
20 project. That's not how groundwater quality monitoring works.
21 You drill monitoring wells that are a ways away so that you can
22 detect them escaping the field if that happens. All these
23 guarantees that that won't happen, they're just promises.
24 They're empty promises, because you won't actually know what the
25 reality is until you're siting monitoring wells farther away

1 from the active mining area. So that's one thing.

2 The other thing we have to consider is that
3 there's really no precedent for this whatsoever, because
4 commercial ISL, in-situ recovery for copper has never been done
5 anywhere. It was attempted in a couple pilot projects at
6 existing mine sites. It -- some people tried to propose a
7 project in Florence, and it got shut down pretty fast. That's
8 not going anywhere.

9 The only comparison is uranium extraction using
10 in-situ recovery methods, and the track record for uranium is
11 pretty bad. There's not a single example of a uranium ISL
12 project that has restored groundwater quality to pre -- to
13 baseline conditions. It has never happened. In most of those
14 existing uranium operations, they're using very similar
15 technology; have massive contamination problems on their hands.
16 There's a track record for this technology.

17 So -- but since we're applying it to a new
18 context, it's kind of like a fresh start. So we're trying --
19 everyone's trying to reassure people that it's going to be fine,
20 but the track record -- the only comparable track record is not
21 very good. So let's keep that in mind, too.

22 But most importantly, if Excelsior is actually
23 serious about gaining people's trust, they will drill a whole
24 bunch of monitoring wells farther away from the project, monitor
25 those, make the information publicly available on a website --

1 in fact, I proposed this directly to Stephen once -- make that
2 data publicly available so people have your trust. You know
3 what Stephen said? He said, No, we're not going to do that. We
4 don't have to do that. That shows you how much he can be
5 trusted.

6 MS. WONG: Okay. We have Rusty Boss and Jay
7 Fumusa.

8

9

COMMENTS

10 MR. BOSS: Good evening. My name is Rusty Boss.
11 I was born and raised in Douglas. I've been here in Cochise
12 County for the last 60 years. Third generation Cochise County
13 resident. My family's been here for a long time.

14 And I'd just like to say to the people, the good
15 people of Dragoon and the surrounding areas that, you know, you
16 have an opportunity to pick your neighbors. Right now you have
17 the people that are working at Jones Camp mine. They're
18 hardworking family people, taxpayers, churchgoers. If the
19 taxpayers, hardworking people leave the area, who do you have
20 left? The people on welfare. People that just aren't producing
21 and are not good people. So you have an opportunity to choose
22 your neighbors. Thank you.

23 MR. FUMUSA: Thank you. Nancy.

24 MS. WONG: Can you state your name for the
25 record?

COMMENTS

MR. FUMUSA: Yes. My name is Jay Fumusa, and I work -- I'm the site superintendent for the environmental programs for the mine. And I've got 25 years' experience in the environmental management program across the state of Arizona.

I just wanted to first say that I'm born and raised in Arizona, and I was raised -- fortunate, raised by parents that loved the outdoors, camping, fishing, hiking, hunting, and I was always exposed to everything out in the environment.

I have a bachelor's degree from ASU in geology. After I started working, I got interested in the environmental aspects, environmental geology of geology, and started working for the State of Arizona for DEQ, and I worked on ADEQ APP permits for a lot of the mines. And in my experience, this is one of the most restrictive, most monitored, compliant permit that I've ever seen for ADEQ under the UIC permit.

We talked about a couple of concentric rings. There's rings that are close to where we're injecting. There's another ring outside of that, another ring. There's four to five rings of monitoring outside of it, and all intersecting fractures.

So again, I want to say to everybody that my experience, what I know of this permit, and I know it inside and

1 out, and my experience in Arizona, it is the most restrictive
2 and detailed permit that I've ever seen written. So thank you.

3 MS. WONG: Okay. We have Jeff Bickel and Steve
4 Raugust.

5 MR. RAUGUST: Raugust.

6 MS. WONG: Raugust.

7

8 COMMENTS

9 MR. BICKEL: Hello. My name is Jeff Bickel. I'm
10 a geologist. I work for Excelsior. I got my degree in geology
11 from Arizona State, and I'm a registered geologist in the State
12 of Arizona. This is my eighth year working on the project.
13 Rebecca mentioned a while ago 33 miles of drill core that's been
14 logged on this project. I've done all that logging. I've
15 analyzed every crack in this ore deposit. So I don't think it's
16 a stretch to say that I'm the world's expert on this ore
17 deposit.

18 Anyhow, I've reviewed the EPA permit and the
19 proposed rings of monitoring wells, and in my professional
20 opinion, they are sufficient to recognize any sort of solution
21 migration outside of the well field. They're all intersecting
22 major fracture networks that are connected with the well field.
23 And that's all I got. Thanks.

24

25

COMMENTS

1 MR. RAUGUST: Thanks for allowing me three
2 minutes to speak. I'm -- can you hear me okay? My name is
3 Steve Raugust. I'm actually new to Excelsior. I started on
4 January 29th. And I'm based in Johnson Camp, and my role here
5 is the technical services manager, and it's my job to ensure
6 that our technical resources are coordinated and produce the
7 highest quality results.

8 My role also allows me to participate directly in
9 the environmental management, environmental stewardship of the
10 project. I've got more than 30 years of industry experience.
11 Fifteen of those, my first 15 years, were strictly in
12 environmental engineering and hydrogeology. The last 15 have
13 been in the mining industry, including permitting, resource
14 development, closure and environmental compliance.

15 I'm a registered geologist in Arizona. I'm a
16 certified engineer and geologist in California. I have a
17 master's degree in mining engineering. Those credentials took
18 me all my life to obtain, and they were very difficult. It was
19 a lot of hard work to get them.

20 My most recent mining experience was on the
21 Greenfield Copper development project in New Mexico where I
22 worked for six years as the permitting manager for the resource
23 development manager, specifically consulting on groundwater
24 environmental geochemistry modeling projects.

25 In my brief experience with Excelsior Mining, I'm

1 impressed with the level of experience and commitment that
2 they've brought to this project from Arizona and points beyond.
3 They've brought real experience and real commitment to the
4 project.

5 In my reviews of the permitting documents, I
6 believe they're stringent enough to be protective of the
7 environment. My colleagues, myself are environmentalists. I
8 grew up on a farm in California. I went to school in the
9 Redwoods in California. I grew up in a generation that read
10 Edward Abbey, Wallace Stegner, Aldo Leopold, John Rathe. I've
11 read them all. So I'm going to speak for myself and my
12 colleagues. We're environmentalists. We're from that
13 generation, and it's very important for us to have a future in
14 the country as well. Thanks very much.

15 MS. WONG: Okay. Rick Zimmerman and Heather
16 Borman.

17

18 COMMENTS

19 MR. ZIMMERMAN: My name is Rick Zimmerman. I am
20 a registered geologist in the State of Arizona, and I have a
21 master's degree in geology. I work for M3 Engineering, and we,
22 as has been stated before, we're involved in preparation of
23 several studies of the project, including the feasibility study
24 that has been -- that was conducted.

25 In my professional career, I have worked as a

1 geologist and hydrogeologist in Arizona for the last 30 years,
2 and worked with -- in contamination investigation and
3 remediation for the EPA and the ADEQ, have been involved in the
4 installation of remediation systems for Superfund sites and
5 state Superfund sites as well.

6 In my work with Excelsior Mining, I find that
7 they have developed a well-designed project that will control
8 the solutions that are injected into the ground and will prevent
9 the solutions from migrating outside of the project boundaries.

10 I've also worked as the project manager for
11 Florence Copper, which is an in-situ copper mining deposit that
12 has been permitted and is currently under construction in
13 Florence, Arizona. And it will -- it's being built, and it will
14 demonstrate that the technology is feasible and protective of
15 the environment and provide confidence to the EPA and to the
16 people of the local community here that it can be done safely
17 and effectively. Thank you.

18 AUDIENCE MEMBER: Great. Then we'll wait 10
19 years after that.

20
21 COMMENTS

22 MS. BORMAN: Hi. My name is Heather Borman, and
23 I didn't come here with an intention to speak, but I think I
24 have a couple things to say. I do have a master's degree in
25 industrial health. That's not environmental health, but it does

1 require a lot of studies in toxicology.

2 The main thing I wanted to say was Apache Powder
3 and Deepwater Horizon. And I think that there is no such thing
4 as guaranteed safety. So there must be a guaranteed backup plan
5 and a restitution plan. It doesn't sound like there is one.

6 Also, I think that these people do not seem to
7 feel assured, reassured, and I think that needs to be addressed.
8 Thank you.

9 AUDIENCE MEMBER: Good job.

10 MS. WONG: Okay. We have Paul Plato and Greg
11 Duschek.

12

13 COMMENTS

14 MR. PLATO: Howdy. My name is Paul Plato. I'm a
15 senior hydrogeologist with Clear Creek Associates. I've been
16 working on the project for several years, and I want to thank
17 the EPA for putting on this forum so that everybody had a chance
18 to express their concerns.

19 I'm a registered geologist in Arizona, and I have
20 a geophysics degree from the University of Arizona. I have 30
21 years of experience in groundwater modeling, which is my
22 principal talent.

23 I started out my career working for the Arizona
24 State Land Department assisting ranchers with grazing leases on
25 securing their water rights. I moved on to work for the Arizona

1 Department of Water Resources in water planning and drought
2 mitigation and modeling to assess future water supplies. My
3 career has been based around water supply management, generally.

4 I've worked in private consulting for the last 25
5 years, and focused on water supply, and I work -- one of my
6 principal clients is the City of Phoenix, who's attempting to
7 build a drought resistant system so that they will have backup
8 water supplies.

9 I also work on recharge in mining, and I've
10 constructed a lot of models in Arizona.

11 My role on this project was to develop the
12 groundwater model, and the purpose of the groundwater model was
13 to distill all the relevant information, find and look at all
14 the well information I could find from all over the basin,
15 gather it together and construct a groundwater model which best
16 assessed what we know about the system.

17 Jeff provided a geologic model of the site. It
18 was very detailed. It has detailed levels of information about
19 how the water flows under the system -- in the system here. And
20 for that reason, this is a very -- been a very unique project.
21 We've had a lot of information to build this model.

22 I just want to assure that we looked at where the
23 water's going to flow, and we mainly focused on minimizing
24 drawdowns. We do not want to draw the aquifer down. We can't
25 afford to pump the water out and dry up the supply. It will

1 make it impossible to mine. So one of the key concerns of the
2 model was to not only develop a containment system and assess
3 where we needed to put wells to capture the water, but we also
4 had to minimize the drawdown, and we did effectively assess that
5 with the model, and it's documented in the permit reports.

6 So I want to thank you for the opportunity to
7 speak, and I appreciate the opportunity. Thank you.

8

9

COMMENTS

10 MR. DUSCHECK: My name is Greg Duschek. I am the
11 GM and the mine controller for the Excelsior project. We've
12 been down this road. Now there's been a 45-day extension,
13 followed by a second 45-day extension. Information is widely
14 available, facts, and yet we keep hearing opposition that is
15 predicated to the actual permit. The information's available,
16 people, and for those of you that stayed to listen, hopefully
17 you took some of it in. But we're willing to offer to work with
18 anybody and help them understand both science and the facts, not
19 the fear. Thank you.

20 MS. WONG: Okay. Christine Szuter and Roger
21 Featherstone.

22

23

COMMENTS

24 MS. SZUTER: Thank you again for this opportunity
25 to speak. The comments that we've been hearing tonight are very

1 real, very important, and they center around having the
2 guarantees of good quality water that continues for when the
3 mine operates and financial adequate -- adequate financial
4 backing for when their -- when there are problems or when there
5 is a need for remediation. We also asked for the monitoring
6 mines.

7 That's against this backdrop of comments that
8 have been made by everybody, many people here, that somehow the
9 intelligence of the people in this room is not recognized.
10 Their knowledge is not respected, and the diversity of their
11 comments is not appreciated.

12 If the mine does the work that it needs to do in
13 terms of that guarantee of high quality water and the monitoring
14 mines, the one comment made that if the people who are working
15 the mine leave, what do we have left? We have our community
16 here of people who are really intelligent, thoughtful and very
17 respectful of what it is that is happening here in our
18 community, and I just want that to be said to everyone here,
19 that it's really important that we recognize the intelligence
20 that's here in this room, whether you're at the mine or not, but
21 that we don't denigrate one another in this context, and that --
22 I really feel -- obviously feel very strongly about that. Thank
23 you.

24
25 COMMENTS

1 MR. FEATHERSTONE: Hi. Roger Featherstone,
2 Arizona Mine Reform Coalition again.

3 I want to follow up on a couple things I ran out
4 of time with. We have provided extensive comments, both as part
5 of a bunch of group comments and then some individual comments.
6 So what I've been doing now is just a few additional questions.

7 I guess one of the big things is I've worked --
8 our coalition is not opposed to mining, but we are opposed to
9 inappropriate projects. And in my years of doing this work,
10 some 40-some years, I've seen a lot of inappropriate projects.
11 I'm not sure if this is one of those or not. But I do know
12 there is a lot of unanswered questions, and I also know that the
13 company's not putting their money where their mouth is. We're
14 hearing about this is the green mine. We're hearing about this
15 as -- is everything's perfect. But we're not seeing the rubber
16 hitting the road. We're not seeing people putting up -- or the
17 company putting up the financial or the protection measures that
18 people have been asking for.

19 I guess lastly, I would like to just kind of
20 maybe do a show of hands. Of all of those people that spoke in
21 favor of this project, how many of them do not have a direct
22 financial stake in this project happening?

23 AUDIENCE MEMBER: You said it.

24 AUDIENCE MEMBER: That's right.

25 MR. FEATHERSTONE: And the opposite of that is

1 how many people that have concerns about this project are
2 concerned about the health of their communities, their property
3 values, the health of the environment, the health of the water
4 that we all require for our life? Thank you.

5 MS. WONG: This public hearing's open until 9:00.
6 Is there anyone right now who wants to make a comment? You
7 should feel free to do so. Can you fill out a speaker form?

8

9

COMMENTS

10 MR. HULL: I have to make an apology, because
11 I've been standing back there making a few snickers at some
12 comments, and that's kind of disrespectful, and I understand
13 that, and I'm sorry for that. But I've got to count on a couple
14 of instances of that, and I think you can understand that, too.
15 But I'm sorry. Okay.

16 MS. WONG: Jim Tullis.

17

18

COMMENTS

19 MR. TULLIS: Hello. I'm Jim Tullis. I do not
20 live here, but I've been spending quite a bit of time down here
21 in the last year. I am looking very hard at possibly relocating
22 here. I also have three friends. We're looking together to
23 move down here. At this point, there's no way we can even think
24 of it. So much has -- you talk about wanting to grow. You can
25 bring people here. You can have the mines boom, and then it's

1 gone. I've been in Utah, Nevada, Wyoming, lot of mining camps.
2 They're gone now. There's nothing left.

3 A lot of green shirts here. I have to ask those
4 guys: How many of you are working live -- your home is here in
5 this area, and how many are local? Where are you going to go to
6 the when the mine's gone? Where's your kids going to go to?
7 That's what I have to think about it. Where's -- when the water
8 wells start going down, how long does it take the EPA to say,
9 hey, shut it off? Thank you.

10 MS. WONG: Marc Boutte.

11

12 COMMENTS

13 MR. BOUTTE: Hi. My name is Marc Boutte, and I
14 live here in Dragoon.

15 AUDIENCE MEMBER: Amen.

16 MR. BOUTTE: I moved here because this is a very
17 peaceful place. It is rural. That's why the people who come
18 here and stay here enjoy it. We don't want our community to, as
19 this last gentleman said, disappear. All right?

20 I have never been in a room where there were so
21 many geologists. However, however, no one has brought up the
22 fact that if there's a major earthquake here, what the hell will
23 happen to these injection wells? Nobody has brought that up.
24 And I have seen what happens in the Gulf of Mexico when things
25 go wrong. I worked on oil and gas platforms, and believe me,

1 things can go horribly wrong.

2 The head of the EPA and who -- who here is an EPA
3 employee. Are you? Are you? All right. Are you? Okay. The
4 head of the EPA two to three years ago said that his purpose in
5 life was to destroy the EPA, and these -- and if this is the guy
6 that's going to back us up if something goes wrong, that's
7 bullshit. All right?

8 And so all of you geologists here try getting the
9 mine to have a -- have an earthquake study done to see what
10 would happen to these wells if there's a major earthquake, and
11 they do happen here. That's why we have the San Pedro Valley
12 here. All right? That's all I have to say. Thanks.

13 MS. WONG: Is there anyone else who'd like to
14 make comments at this point? Okay. Then I'm just going to go
15 off record for -- until, like, five before 9:00, and then I'll
16 close the hearing at 9:00.

17 (Off the record at 8:37 p.m. to 9:00 p.m.)

18 MS. WONG: Before we conclude this public
19 hearing, is there anyone else who would like to comment?

20 If there are no other comments, I will conclude
21 this public hearing.

22 This public hearing is now closed. Thank you all
23 for coming and for participating in this public hearing.

24 (Proceeding concluded at 9:00 p.m.)

25

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) ss.
 2 COUNTY OF MARICOPA)
 3

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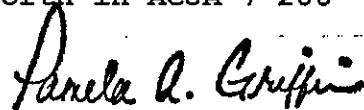
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